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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,308	11/14/2003	W. Kenneth Menke	54071-42881	1211
21888	7590	06/01/2005	EXAMINER	
THOMPSON COBURN, LLP ONE US BANK PLAZA SUITE 3500 ST LOUIS, MO 63101			REHM, ADAM C	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/713,308	MENKE, W. KENNETH	
	<b>Examiner</b>	<b>Art Unit</b>	
	Adam C. Rehm	2875	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-21 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/14/2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "each electronic circuit member having a light" must be shown or the feature(s) canceled from the claim(s). The electronic circuit member, as shown in FIG. 2, does not appear to have a light or LED at its center as described on Page 9, Lines 22-23, but instead shows plural lights beyond the center of the electronic circuit member 18. No new matter should be entered.
2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 14-18 are rejected under 35 U.S.C. 102(a) as being anticipated by STOPA ET AL. (US 6,641,284).

5. Regarding Claims 14-18, STOPA teaches a support casing (100, FIG. 1) having a rear wall (50) with a plurality of pairs of posts projecting outwardly from the rear wall (52, pre-assembly in FIG. 1 and post-assembly in FIG. 6); and, a plurality of electronic circuit members (a plurality of circuit members are illustrated in FIGS. 1 and 9a), each electronic circuit member having a light (42), and each electronic circuit member being removably mounted on the rear wall by engaging between a pair of posts (FIG. 1); the rear wall being a heat sink (50, Column 4, Lines 61-65); each light being a light emitting diode (42, Column 4, Lines 61-65); the plurality of electronic circuit members being electronically connected in series (illustrated in FIGS. 1 and 9a); a plurality of optics (14 and 30 in FIG. 1) with each light having an optic positioned adjacent the light (FIGS. 1 and 4).

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-4, 7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by DART ET AL. (US 4,124,880).

8. Regarding Claim 1, DART teaches: a support casing (10, FIG. 1) having a pair of walls with a spacing between the walls (separated wall sections, 42, FIGS. 3 and 4); a signal light optic (100, FIGS. 1 and 2) positioned in the spacing between the pair of walls (FIGS. 2 and 4) and engaging with both of the pair of walls (FIG. 2); and, a spring brace (103, FIGS. 1 and 2) removably attached to at least one of the pair of walls and engaging with the signal light optic (Column 4, Lines 29-31, FIGS. 1 and 2), the spring brace removably holding the signal light optic in engagement with both of the pair of walls (Column 4, Lines 29-31, FIGS. 1 and 2).

9. Regarding Claim 2, DART teaches a spring brace (103) solely removably holding the signal light optic (100) in engagement with both of the pair of walls (Column 4, Lines 29-34, FIGS. 1 and 2).

10. Regarding Claim 3, DART teaches a spring brace (103) being removably attached to both of the pair of walls (Column 4, Lines 29-31, FIGS. 1 and 2 provide spring 103 having a top end resiliently engaged to a top wall and a bottom end extending into a bottom wall, FIGS. 1 and 2).

11. Regarding Claim 4, DART teaches a spring brace (103) extending across the spacing between the pair of walls and extending across the signal light optic positioned in the spacing (FIGS. 1 and 2).

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12. Regarding Claim 7, DART teaches the pair of walls having a forward edge with a notch in the forward edge (separated wall sections with notches shown in central portions thereof, 42, FIGS. 3 and 4); and, the signal light optic having an exterior surface with portions of the exterior surface engaging in the notches in the pair of walls (FIG 2 illustrates optic 100 engaging the walls and notches thereof).

13. Regarding Claim 8, DART teaches a plurality of signal light optics (100) that are each positioned in the spacing between and engaged with both of the pair of walls (separated wall sections with notches shown in central portions thereof, 42, FIGS. 3 and 4); and, the spring brace (103) being one of a plurality of spring braces that each are removably attached to at least one of the pair of walls and engaged with one of the signal light optics to removably hold the signal light optic in engagement with the pair of walls (FIG. 1 illustrates two duplicate structures with corresponding duplicate members, which are specifically identified above).

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over DART ET AL. (US 4,124,880) in view of GOSSWILLER (US 3,271,735).

16. With respect to Claim 5, DART teaches the aforementioned elements of depending Claim 3 and independent Claim 1 including at least one of the opposite ends

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of the spring brace (103) engaged in one hole of the pair of walls (FIG. 1). However, DART does not disclose a hole in each of the pair of walls. GOSSWILLER teaches a hole (93) in each of the pair of walls (FIG. 3, Column 3, Lines 61-64) for the purpose of engaging opposite ends of the spring brace. It would have been obvious at the time of the invention to one of ordinary skill in the art at the time of invention to provide the signal light of DART with holes on each wall as taught by GOSWILLER in order to hold both ends of the spring brace.

17. Claims 9-13, are rejected under 35 U.S.C. 103(a) as being unpatentable over DART ET AL. (US 4,124,880) in view of STOPA ET AL. (US 6,641,284).

18. With respect to Claims 9-13, DART teaches the aforementioned elements of independent Claim 1, but does not provide a rear wall or the electronic circuit member mounted on said rear wall; the electronic circuit member having a light emitting diode; a post projecting outwardly from the rear wall and the electronic circuit member mounted on the rear wall by engaging with the post; the post being one of a pair of posts that project outwardly from the rear wall and the electronic circuit member being mounted on the rear wall by engaging the pair of posts; or the support casing being a heat sink.

19. However, STOPA teaches a rear wall (50, FIG 1) and an electronic circuit member mounted on the rear wall (40) adjacent to a signal light optic (10); the electronic circuit member having a light emitting diode (42) with a post projecting outwardly from the rear wall (52, pre-assembly in FIG. 1 and post-assembly in FIG. 6); the electronic circuit member being mounted on the rear wall by engaging with the post (FIG 1 prior to assembly and FIG. 6 thereafter); the post being one of a pair of posts that project

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outwardly from the rear wall (52, in FIG 1 prior to assembly and FIG. 6 thereafter), and, the electronic circuit member being mounted on the rear wall by engaging between the pair of posts (52, in FIG 1 prior to assembly and FIG. 6 thereafter, Column 4, Lines 65-67); the support casing being a heat sink (50, Column 4, Lines 65-67) for the purpose of cooling.

20. STOPA teaches a light assembly for efficiently conducting heat away from the LEDs in order to deter overheating, which results in shorter life of the LEDs (Column 6, Lines 7-10) by providing a compressed relationship in order to enhance thermal transfer between the elements (Column 5, Lines 61-63). It would have been obvious to one of ordinary skill in the art at the time of invention to modify the structure of DART to include a rear wall with mounting posts as taught by GOSWILLER in order to provide thermal transfer between the elements and attachment thereof and to deter overheating, which results in a shorter LED lifespan.

21. Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over STOPA ET AL. (US 6,641,284) in view of DART ET AL. (US 4,124,880).

22. With respect to Claims 19-21, STOPA teaches the aforementioned elements of independent Claim 14 and dependent Claim 18 including the plurality of electronic circuit members (FIG. 1) but does not provide a pair of side walls, a plurality of optic-engaging notches or spring braces.

23. However, DART teaches a pair of side walls that project outwardly (separated wall sections, 42, FIGS. 3 and 4), a spacing (the area between wall sections 42 in FIGS. 3 and 4); a plurality of notches in the pair of side walls (separated wall sections 42 with



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notches shown in central portions thereof, FIGS. 3 and 4); and, each optic of the plurality of optics engaging in a pair of notches (FIG 2 illustrates optic 100 engaging the walls 42 and notches thereof); and a plurality of spring braces removably attached to the side walls and extended over and holding the optic in the spacing (FIG. 1 illustrates two duplicate structures with corresponding duplicate members).

24. DART teaches a signal light with clips for releasably holding optics (Column 4, Lines 29-32). It would have been obvious to one of ordinary skill in the art at the time of invention to modify the structure of the structure of STOPA to include a spring clip for easy replacement of parts.

#### ***Allowable Subject Matter***

25. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Notably, Claim 6 incorporates a signal light optic having a concavity with an interior volume and a spring brace having projections that project into the concavity interior volume, not disclosed by the prior art of record.

#### ***Conclusion***

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

27. DORSKY (US 3,375,368) teaches a lighting fixture and reflector therefore that is secured into engagement with a light source and side walls via spring engagement.

28. BECK ET AL. (US 3,851,165) teaches a directional signal beacon having an optic that is secured into engagement with side walls via spring straps.

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29. LASER (US 4,210,954) teaches a reflector having springs that bias a reflector against a light source and are detachable.

30. LEMCKE (US 4,430,696) teaches a lamp mounting means having two coil springs mounted between two pairs of posts for securing a reflector.

31. WANIGA (US 5,072,349) teaches a light device having a retainer spring for securing a reflector in a receptacle.

32. PILESKE (US 5,215,371) teaches a lamp holder having an optic that is retained against a wall with a spring mounted between a pair of posts.

33. SCHAFFER (US 6,283,613) teaches a plurality of LEDs having optics and mounted within a housing having a rear wall and depending side walls.

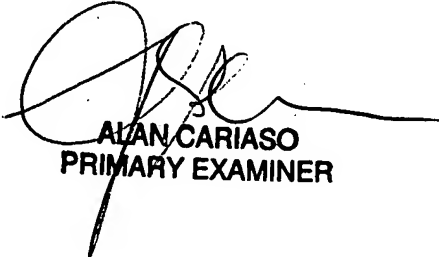
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam C. Rehm whose telephone number is 571.272.8589. The examiner can normally be reached on M-F 9-5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571.272.2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ACR  
May 25, 2005



ALAN CARIASO  
PRIMARY EXAMINER